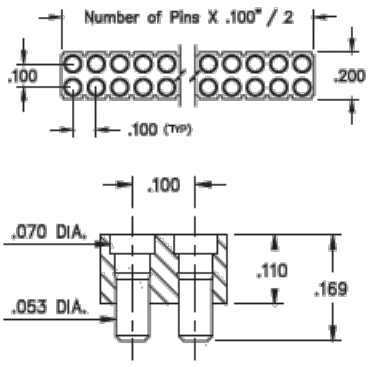
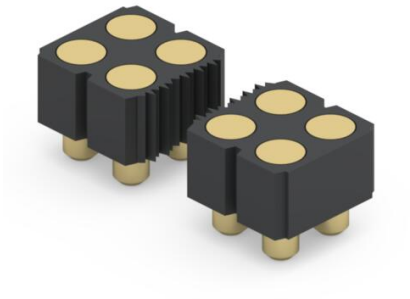
PRODUCT NUMBER: 419-10-220-30-041000

www.mill-max.com
DATA SHEET



Coplanarity .005". For Pin counts >20 positions, consult Technical Support.



	General Information	
1	**Product Lifecycle:**	Active
	Product Family:	Spring-Loaded Connector
	Type:	Pad Connector with Flat Face
2	**Description:**	PCB Mount Target Pad Header
	Description2:	Vertical Mount SMT Target; Flat Face
	Pitch:	.100" (2,540mm)
	Number of Pins:	20
	Head Type:	Flat Face
	Tail Type:	N/A
3	**Operating Temperature Range:**	-55/+125° C
	Country of Origin:	USA
4	**ROHS:**	Yes

419-10-220-30-041000 - SPECIFICATIONS

Product Attributes	
5 Plating Code:	10 - shell: 10 µ" Gold over 100 µ" Nickel
Insulator Material:	High Temp Thermoplastic
Rows:	Double Row
Frame Type:	N/A
Contact Number:	N/A
Mounting Tab:	N/A
Target Face Type:	Flat Face

Key Dimensions	
Above Board Height:	.169" (4,293mm)
Head Diameter:	.070" (1,778mm)
Insulator Height:	.110" (2,794mm)

Electrical Specifications	
6 Current Rating:	Application Specific
Insulation Resistance:	10,000 MΩ min.
Rated Voltage:	100 VRMS/150 VDC
Dielectric Withstanding Voltage:	1,000 VRMS min.

Mechanical Specifications	
7 Shock:	No Elect. Discontinuity > 1µs @ 50g
8 Vibration:	No Elect. Discontinuity > 1µs @ 10-2000HZ, 15 G

Mounting Specifications	
Mounting Type:	Surface Mount
Mounting Tab:	N/A
SMT Pad Size:	0.063

Packaging Information	
9 Packaging:	Packaged in Box or Tube
Tape Width:	N/A

Environmental & Export Classifications	
REACH Status:	REACH Unaffected
ECCN:	Contact Factory
HTSUS:	8536.90.4040
Cage Code:	3N087
Moisture Sensitivity Level (MSL):	1 (Unlimited)
Special Handling Code:	UNDF
Prop 65:	N
Static Sensitive:	N

NOTES:

1. Part is Active and in Production, No Scheduled Obsolescence
2. **Standard Tolerances**
   Assembly tolerance: +/-.010" (.25mm)
   Connector Length "L"

Connector Length "L"	Tolerance
L ≤ 2" (L ≤ 50.8 mm)	+/- .005" (+/- .127 mm)
2< L ≤ 3" (50.8 < L ≤ 76.2 mm)	+ .007/ - .006" (+ .178/ -.152 mm)
3< L ≤ 4" (76.2 < L ≤ 101.6 mm)	+ .009 / - .007" (+ .229 / - .178 mm)
4< L ≤ 5" (101.6 < L ≤ 127 mm)	+ .011 / - .008" (+ .279 / - .203 mm)
5< L ≤ 6.4" (127 < L ≤ 162.56 mm)	+ .013 / - .009" (+ .330 / - .229 mm)

   Insulator width: +/-.005 (.13mm)
   Insulator height: +/-.005 (.13mm)
   Co-planarity of SMT connectors: .005" (.13mm) up to 1" (25.4mm) in connector length
   Insulator Flatness: .005" (.13mm) up to 1" (25.4mm) in connector length
   Pin Length: +/-.005 (.13mm)
   Pin Diameter: +/-.002 (.051mm)
   Pin Angle: +/-2°
3. Per IEC 60512-11-(4,-9,-10,-12)
4. Mill-Max products labeled with the RoHS symbol are compliant with all three ROHS Directives. All of our products previously described as RoHS (2002/95/EC) and RoHS-2 (2011/65/EC) are also compliant with RoHS-3 (2015/863/EU).
5. **Pin Plating:** 10 µ" Gold over 100 µ" Nickel
6. Current rating is typically a measured function of the female socket/connector. The amount of current a solid, male, brass pin can tolerate is a direct relation of the heat displaced based on current and the ability of neighboring components to handle displaced heat.
7. For discrete pin only. Per IEC 60512-6-3: Test 6c: Shock
8. For discrete pin only. Per IEC 60512-6-4: Test 6d: Vibration (sinusoidal)
9. Not all part numbers in the series may be packaged in tubes. Some specific part numbers may be packaged in a box.

ADDITIONAL NOTES AND SPECIFICATIONS

In the interest of improved design, quality and performance , Mill-Max reserves the right to make changes in its specifications without prior notice. Specifications and tolerances are provided wherever possible. The tolerance on dimensions of critical to function features is typically held tighter than the stated standard tolerances, such as press-fits, holes and lengths affecting the coplanarity of SMT products. Due to the wide variety of interconnects Mill-Max offers, the specific tolerances vary from product to product. If you need information regarding the tolerance of a particular part, please contact Technical Services.

RELATED LINKS AND DOCUMENTS

- Product Detail: 419-10-220-30-041000 - Spring-Loaded Header
- Engineering Notebook: **Introduction to Spring-Loaded Pogo Pins & Connectors**
- Environmental Compliance: https://www.mill-max.com/rohs